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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
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ART UNIT	**PAPER NUMBER**
3731	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.**	**Applicant(s)**	
	10/678,503	NAGASE ET AL.	
	Examiner	**Art Unit**	
	Melanie Tyson	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 March 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to applicant's amendments received on 09 March 2007. Corrections made to the drawing, abstract, disclosure, and claims are accepted.

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "the driving rods" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

   1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forman et al. (Patent No. 5,275,608). Forman discloses a surgical instrument (see entire document) comprising an insertion portion (for example, see Figures 1A-1C, element 16), a treatment unit (12) including first and second treatment pieces (forceps 11; for example, see column 5, lines 5-9), an operating unit (14) including first and second handles (first and second loops), a supporting member (for example, see Figure 2, element 18) linking the treatment unit (12) and operating unit (14; for example, see column 4, lines 15-18), a driving rod (18) arrayed generally in parallel with the supporting member (for example, see column 5, lines 3-5) so as to be capable of advancing and retreating ("longitudinal displacement"; for example, see column 5, lines 27-30), and a second link mechanism for converting advancing/retreating actions of the driving rod (28) into opening/closing actions of the treatment unit (for example, see column 5, lines 17-25).

Forman fails to disclose a first link mechanism capable of converting opening/closing actions of the operating unit (14) into advancing/retreating actions of the driving rod (28), since the driving rod (28) is directly connected to the operating unit (for example, see Figure 3), which is in a parallel mapping relation with the second link mechanism. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a link between the operating unit (14) and driving rod (28), since it has been held that constructing a formally integral structure in various elements involves only routine skill in the art.

Forman further discloses two joints provided at the tip and base side of the driving rod (joints 24 and 20) having axes perpendicular to the opening/closing shafts (for example, see Figure 2), a turning shaft at the tip of the supporting member (for example, see Figure 2, the portion connected to rotational axis 24) and a turning shaft at the base of the supporting member (for example, see Figure 5, the portion connected to 14 with screws 44) having axes perpendicular to the opening/closing shafts (for example, see Figures 2 and 5; connecting element 36 and cables 32). With further respect to claim 2, Forman fails to disclose specifically that the distance between the two joints and the two shafts are configured so as to be the same length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the distances claimed to be the same length, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

With further respect to claim 6, Forman further discloses the operating unit (14) comprises a turning operating piece (for example, see Figure 3, handle on the left), an opening/closing operating piece (handle on the right) linked to the turning operating piece through a second opening/closing shaft (cables 32), a third joint provided to the opening/closing operating piece (for example, see Figure 3), and a fourth joint provided on the driving rod essentially adjacent to the third joint (joint on the right handle). However, Forman fails to disclose specifically that the longitudinal distance between the third and fourth joints, and the distance between the first and second joints are configured to be the same length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the distances claimed to be the same length, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

7. Claims 3, 4, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forman in view of Suzuta (Patent No. 6,592,572 B1).

Forman discloses a device as described above, including, a turning treatment piece (for example, see Figures 1A-C) with a linked opening/closing treatment piece (forceps 11) through a first opening/closing shaft (for example, see Figure 3, connecting element 36 at the end of spring 34), and a first turning shaft at the base portion of the turning treatment piece (for example, see Figure 2, portion connected to rotational axis 24). However, Forman fails to disclose a first and second joint on the treatment piece, and a second turning shaft adjacent to the base side of the first turning shaft on the treatment piece.

Suzuta discloses a surgical instrument (see entire document) comprising an opening/closing treatment piece (for example, see Figure 2). Suzuta teaches a first joint (30) provided at the base (29) of the opening/closing treatment piece, a second joint adjacent to the base side of the first joint (joint 27 on adjacent portion 26), and adjacent first (31) and second (26a) turning shafts (the movement of 31 and 26a causes 29 and 26 to turn in the direction of the arrows). It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Forman as taught by Suzuta in order to provide the device with an improved degree of freedom for treatment (for example, see column 1, lines 60-63).

Furthermore, Forman in view of Suzuta fails to disclose specifically that the distance between the joints and the distance between the shafts are configured so as to be the same length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the distances claimed to be the same length, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

With further respect to claims 5 and 7, Forman in view of Suzuta further discloses the operating unit (14) comprises a turning operating piece (for example, see Figure 3, handle on the left), an opening/closing operating piece (handle on the right) linked to the turning operating piece through a second opening/closing shaft (cables 32), a third joint provided to the opening/closing operating piece (for example, see Figure 3), and a fourth joint provided on the driving rod essentially adjacent to the third joint (joint on the right handle). However, Forman in view of Suzuta fails to disclose specifically that the longitudinal distance between the third and fourth joints, and the distance between the first and second joints are configured to be the same length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the distances claimed to be the same length, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forman in view of Nagase et al. (Publication No. 2003/0158576 A1). Forman discloses

a device as described above, including, the operating unit and treatment unit are capable of turning in a left/right direction. However, Forman fails to disclose the operating unit and treatment unit are capable of turning in an up/down direction.

Nagase discloses an operating unit (see entire document). Nagase teaches the operating unit is capable of turning in a left/right direction (for example, see Figure 13) and in an up/down direction (for example, see Figure 12). Nagase further teaches a first link mechanism comprising a first up/down turn arm portion connected to a second operation handle (for example, see Figure 7) and a fist left/right turn arm portion (46) connected to the first up/down turn arm portion (for example, see Figure 7), and a second link mechanism comprising a second up/down turn arm portion (14b) connected to the second treatment piece (for example, see Figure 2) and a second left/right turn arm portion (16) connected to the second up/down turn arm portion (for example, see Figure 3; can pivot left/right about longitudinal pin 17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Forman as taught by Nagase in order to provide a greater range of motion (for example, see paragraph 113), thus facilitating the use of the device during procedures that require a greater range of motion.

With further respect to claim 10, Forman in view of Nagase further disclose first and second pivotable shafts, and first, second, third and fourth pivots (for example, see Figures 2 and 7). However, Forman in view of Nagase fails to disclose the specific distances claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the distances to those claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Thursday 9-5:30, Fridays 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson MT
May 15, 2007

(JACKIE) TAN-UYEN HO
PRIMARY EXAMINER
5/24/07